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10/535,108

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Hans-Kervin Bruins

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EXAMINER

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/535,108
Filing Date: October 05, 2005
Appellant(s): BRUINS ET AL.

Christopher J. Kroff
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 03/23/2010 appealing from the Office action mailed 11/10/2009.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 28-40 and 43-45 stand rejected.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the

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subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

| | | |
|-----------|-----------------|--------|
| 5,716,602 | Uick | 2-1998 |
| 5,885,600 | Blum et al. | 3-1999 |
| 5,648,398 | Bledlock et al. | 7-1997 |

Abivardi, C. "Iranian Entomology an Introduction Applied Entemology" Springer, vol2 (2001), pp. 485-523.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Applicant Claims

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2. Determining the scope and contents of the prior art.
3. Ascertaining the differences between the prior art and the claims at issue; and resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. Claims 28, 29, 31-33, 36-41, and 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uick (US Patent 5716602 Published 02/10/1998) in view of Abivardi (Iranian Entomology an Introduction – Applied Entomology Volumne 2, Published 2001) as evidenced by Bledock et al. (US Patent 5648398, Published 07/15/1997).

Applicant Claims

Applicant claims a method of repelling arthropods comprising applying to a product, area, and or surface a repellent composition comprising at least one portion of the plant Vitex agnus-castus.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

Uick teach an insect repellent sunscreen comprising DEET, octyl methoxycinnamate, fragrance, emulsifiers, and water which can be applied onto human skin and then rubbed on and spread out over the skin for protection outdoors against annoyance by pests and the harmful effects of UV rays. (See title, column 1, Lines 11-19, column 5, Table of example compositions, and column 6, Lines 51-54).

Ascertainment of the Difference Between Scope the Prior Art and the Claims (MPEP §2141.012)

Uick. lacks a teaching wherein the repellent composition comprises a portion or extract of the plant Vitex agnus-castus. This deficiency is cured by the teachings of Abivardi.

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Abivardi teaches a composition of pine seed with leaves of *Vitex agnus castus* that can be cooked in olive oil and rubbed onto the entire body as a repellent against insects and other injurious animals (see page 488, Lines 1-19). Furthermore, Abivardi teaches that the leaves of *Vitex agnus castus* can be scattered in the house, including on the floors, in order to repel insects or vermin by their smoke and/or odor. (See page 489, Lines 11-21 and page 523, Lines 16-19).

Bledcok et al teach insect repellent lotions and sprays comprising DEET is effective against Lyme disease ticks. (See title and column 1, Lines 20-53).

***Finding of Prima Facie Obviousness Rational and Motivation
(MPEP §2142-2143)***

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to add the leaves of *Vitex agnus-castus* as an insect repellent to the composition of Uick, as suggested by Abivardi and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because Abivardi teaches that the leaves of *Vitex agnus castus* act as an insect repellent. Therefore, it would have been obvious to one of ordinary skill in the art to use the leaves of *Vitex agnus-castus* as an insect repellent to be added to the composition taught by Uick in order to enhance the insect repellency activity of the composition.

It is the Examiners position that a composition comprising DEET would necessarily act as a repellent against ticks. This is substantiated by the teachings of Bledock et al.

In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

2. Claims 30, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uick (US Patent 5716602 Published 02/10/1998) in view of Abivardi (Iranian Entomology an Introduction – Applied Entomology Volume 2, Published 2001) further in view of Blum et al. (US Patent 5885600, Published 03/23/1999) as evidenced by Bledock et al. (US Patent 5648398, Published 07/15/1997).

Applicant Claims

Applicant claims a method of repelling arthropods comprising applying to a product, area, and or surface a repellent composition comprising at least one portion of the plant *Vitex agnus-castus*.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

The combined teachings of Uick and Abivardi is disclosed above.

Ascertainment of the Difference Between Scope the Prior Art and the Claims (MPEP §2141.012)

Uick. and Abivardi lack a teaching wherein the repellent composition comprises a antioxidant. This deficiency is cured by the teachings of Blum et al.

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Blum et al. teach, "Insect repellents have been used for centuries to prevent insects from annoying humans and animals alike. Repellents have also been used to prevent insect harm to such items as food, clothing, and furniture." (See column 1, Lines 15-19). "A composition that has insect repellent properties is made from cold processed extracted oils and an antioxidant ..." (See abstract). The composition may further comprises a solvent, UV absorber or stabilizer, and antioxidants (such as butylated hydroxytoluene and ascorbyl palmitate). (See columns 7-8, claims 1-17). "The resultant composition may then be formulated into many different items, such as lotions, sprays, and creams for use on humans, animals and vegetation." (See column 2, Lines 49-51). "The various compositions work effectively against arachnids (spiders, ticks, mites), caterpillars, cockroaches, silver fish, moths, slugs, bees, yellow jackets, beetles, aphid, meals bugs, green flies, horse flies, gnats, mosquitoes, and chiggers." (See column 6, Lines 19-23).

***Finding of Prima Facie Obviousness Rational and Motivation
(MPEP §2142-2143)***

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to add antioxidants to the composition of Uick , as suggested by Blum et al. and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because Blum et al. teach that insect repellent compositions can comprise antioxidants. Therefore, it would have been obvious to one of ordinary skill in the art to use the

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antioxidants butylated hydroxytoluene and ascorbyl palmitate to be added to the composition taught by Uick in order to add antioxidant functionality to the composition.

In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

(10) Response to Argument

Appellant argues the prior art does not suggest the desirability of combining the teachings of Uick with Abivardi. Appellant's argument has been fully considered but found not to be persuasive. It is the Examiners position that since both Uick and Andivardi are directed to compositions that act as insect repellents, it would have been obvious to one of ordinary skill in the art to combine the compositions for the purpose of achieving an additive effect in insect repellency achieved by each of the compositions alone.

Appellant further argues that it is clear from the teaching of Abivardi that it is the Pine seeds not vitex agnus castus that has insect repellency. Appellant's argument has been fully considered but found not to be persuasive. It is the Examiners position that there is no basis in the prior art for such an assertion. Assuming *arguendo* that such is

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the case, it is the Examiners position that the instant claims are directed to the composition as a whole having repellency against ticks and mites and not the individual components of the composition.

Appellant further argues that firstly insects and arachnids, such as ticks and mites, are distinct from one another and therefore it would not be expected that compounds, particularly plant extracts, useful as insect repellents would be useful against arachnids. Appellant's argument has been fully considered but found not to be persuasive. It is the Examiners position that the composition of Uick as evidenced by the teachings of Bledlock et al. has repellency against ticks and mites. It is further the Examiners position that as discussed above it would have been obvious to add leaves of vitex agnus castus to the composition of Uick. The combined composition of Uick and Abivardi would result in a composition that has repellent activity in ticks and mites. It should also be noted that as evidenced by Bledlock et al. and Blum et al. that one of ordinary skill in the art of insect repellency that a composition labeled an insect repellent can have utility against a wide variety of insects and injurious animals such as arachnids.

Appellant finally argues that Blum et al. is not enabled for repelling ticks and mites. Appellant's argument has been fully considered but found not to be persuasive. The Examiner has solely relied on the teachings of Blum et al. for the purpose of showing that antioxidants can be added the insect repellent of Uick.

(11) Related Proceeding(s) Appendix

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No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Johann R. Richter/

Supervisory Patent Examiner, Art Unit 1616

Conferees:

/Ali Soroush/

Examiner, Art Unit 1616

/SREENI PADMANABHAN/

Supervisory Patent Examiner, Art Unit 1627